1000000

## **CLAIMS**

 Method of processing addresses of communication terminals (Tj) of a packet-switched communication network (N) using a connectionless protocol, characterized in that it consists in integrating into an address of a communication terminal (Tj) information data representing at least one characteristic of a communication interface that connects it to said network (N).

5

10

15

20

25

30

35

- 2. Method according to claim 1, characterized in that the destination address field is divided into sub-fields each intended to receive terminal address information or a communication interface characteristic.
- 3. Method according to either claim 1 or claim 2, characterized in that each communication interface characteristic is selected from a group comprising at least a maximum transmission unit (MTU) defining the maximum packet size supported by the communication interface and the reliability level of the communication interface.
- 4. Method according to any one of claims 1 to 3, characterized in that, in the event of a request to transmit a data packet to a destination communication terminal (T2) designated by an address integrating said information data, said information data representing at least one characteristic of the communication interface of said destination terminal (T2) is determined from said address, after which transmission parameters of the communication terminal (T1) seeking to transmit data packets to the destination communication terminal (T2) are configured as a function of said information data that has been determined.
- 5. Method according to claim 4, characterized in that said determination is effected in each communication terminal (T1) of said network (N) responsible for transmitting said packet.
- 6. Method according to claim 5, characterized in that said address includes information data representing the reliability level of the communication interface of the destination terminal (T2) and protocol time management parameters of a protocol stack belonging to a level three layer of the OSI model are configured in said communication terminal (T1) having to transmit said data packet as a function of the reliability level contained in the destination address of said packet to be transmitted.

......

7. Method according to either claim 5 or claim 6, characterized in that said address includes information data representing the maximum transmission unit supported by the communication interface and the size of said packet to be transmitted is adjusted in said communication terminal (T1) having to transmit said data packet as a function of the maximum transmission unit (MTU) contained in the destination address of said packet to be transmitted.

5

10

15

20

25

30

35

- 8. Address processing device (D) for a communication terminal (Tj) of a packet-switched communication network (N) using a connectionless protocol, characterized in that it comprises processing means (MT) adapted, in the presence of an address of a communication terminal (T2) of the network (N) that is the destination of a data packet to be transmitted containing information data representing at least one characteristic of its communication interface, to determine said information data and then to adapt the communication parameters of the communication terminal (T1) that they equip and which is seeking to transmit data to said destination terminal (T2) as a function of said information data that has been determined.
- 9. Device according to claim 8, characterized in that each communication interface characteristic is selected from a group comprising at least a maximum transmission unit (MTU) defining the maximum packet size supported by the communication interface and the reliability level of the communication interface.
- 10. Device according to claim 9, characterized in that said processing means (MT) are adapted to determine in said address information data representing the reliability level of the communication interface and to configure protocol time management parameters of a protocol stack belonging to a level three layer of the OSI model in said communication terminal (T1) having to transmit said data packet as a function of the reliability level contained in said address of said packet to be transmitted.
- 11. Device according to either claim 9 or claim 10, characterized in that said processing means (MT), firstly, determine in said address information data representing the maximum transmission unit (MTU) supported by the communication interface and, secondly, adjust the size of said data packet to be transmitted as a function of the maximum transmission unit

(MTU) contained in its header.

5

10

15

20

25

- 12. Device according to either claim 8 or claim 9, characterized in that it is connected to a memory (M) installed in said communication terminal (T1) having to transmit said data packet and in which configuration data of the communication parameters of said communication terminal (T1) is stored in corresponding relationship to said addresses of destination communication terminals (T2) and said processing means (MT) extract from said memory (M) the configuration data stored in corresponding relationship to the address of the communication terminal (T2) that is the destination of said data packet to be transmitted so as to configure the communication parameters of said communication terminal (T1) accordingly.
- 13. Communication terminal (Tj) for a packet-switched communication network (N) using a connectionless protocol, characterized in that it comprises a processing device (D) according to any one of claims 8 to 12.
- 14. Use of the processing method, the processing device (D) and the communication terminal (Tj) according to any one of the preceding claims in Internet protocol (IP) communication networks.
- 15. Use according to claim 14, characterized in that the Internet protocol communication network is of the IPv6 type.
- 16. Use according to claim 15, characterized in that 16 bits of the address are intended to incorporate said information data.
- 17. Use according to claim 16, characterized in that 10 bits of the address are intended to incorporate information data representing the maximum transmission unit (MTU).
- **18.** Use according to either claim 16 or claim 17, characterized in that six bits of the address are intended to incorporate information data representing the reliability level.